James Hamilton
University of California, San Diego
Economics 220B, Winter 2007
Course web page: http://dss.ucsd.edu/~jhamilto/Econ220B.html

Obtaining the Reading Material

Books available at UCSD bookstore:

Fumio Hayashi, *Econometrics,* Princeton University Press, 2001. This is the main text for the course. Click here for the home page for Hayashi's text.

James D. Hamilton, *Time Series Analysis,* Princeton University Press, 1994. This book is used as an optional supplementary text for the course and is also used in other courses at UCSD.

Journal articles:

N. Gregory Mankiw, David Romer, and David Weil, "A Contribution to the Empirics of Economic Growth," Quarterly Journal of Economics,107, May 1992, pp. 407-437.

Howard J. Wall, "Using the Gravity Model to Estimate the Costs of Protection," Federal Reserve Bank of St. Louis Review, Jan/Feb 1999, pp. 33-40.

Stephen V. Cameron and James J. Heckman, "The Nonequivalence of High School Equivalents," Journal of Labor Economics, Vol. 11, part 1, Jan 1993, pp. 1-47.

Joshua D. Angrist, "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records," American Economic Review, 80, June 1990, pp. 313-336; Errata, December 1990, pp. 1284-1286.

James D. Hamilton, "The Supply and Demand for Federal Reserve Deposits," Carnegie-Rochester Conference Series on Public Policy, 49, December 1998, pp. 1-44.

Hard copies of above articles are available in the Graduate Student Lounge (Room 106 of Sequoyah Hall). Please keep these articles in the lounge at all times. You can also try to obtain the articles from the original sources referenced here.

Alternatively, several of the articles can be downloaded. The syllabus you are now reading can also be viewed as an HTML document on http://econ.ucsd.edu/~jhamilto/econ220b.html. If you are viewing this as an HTML document, clicking on any active link above will take you immediately to the source where the article can be viewed online or downloaded. You will need the Adobe Acrobat Reader to view these, which can be downloaded from Adobe.

Grading Policy

Grades for Econ 220B will be determined as follows:

20%: Problem Sets. You may work together on these, but must hand in your own write-up of the answers. These are used as a study guide and supplement to the reading and lectures.

30%:Midterm Exam. This will be on Monday, Feb 12. No books or notes allowed.

50%: Final Exam. This will be on Wednesday, March 21, from 9:00 a.m. to noon

Office hours for Professor Hamilton:

Tuesdays 11:00-12:00 in Econ 307

Office hours for T.A. Grayson Calhoun:

Wednesdays 11:00-12:00 and Thursdays 11:00-12:00 in Econ 123

TA review session Fridays 2:00-3:20 in Social Science Building 108

Course Outline

Mon Jan 8   Review of linear algebra (Hamilton, Section A.4, pp. 721-739)

Wed Jan 10   The algebra of least squares (Hayashi, Section 1.2)

Mon Jan 15   University holiday-- no scheduled class

Wed Jan 17   The classical regression model (Hayashi, Sections 1.1 and 1.3; Hamilton, Section 8.1)

Mon Jan 22	Hypothesis testing (Hayashi, Sections 1.4 and 1.7)
Wed Jan 24	Generalized least squares (Hayashi, Section 1.6)
Mon Jan 29	Asymptotic distribution theory (Hayashi, Sections 2.1-2.2; Hamilton, Section 7.1)
Wed Jan 31	Large sample properties of OLS (Hayashi, Sections 2.3 and 2.9; Hamilton, Section 8.2)
Mon Feb 5	Hypothesis testing-- asymptotic results (Hayashi, Sections 2.4-2.6; Hamilton, Section 8.2)
Wed Feb 7	Maximum likelihood estimation (Hayashi, Section 1.5; Hamilton, Section 5.7)
Mon Feb 12	Midterm exam
Wed Feb 14	Heteroskedasticity and serial correlation (Hayashi, Sections 2.7, 2.8, 2.10, 2.11; Hamilton, Section 8.3)
Mon Feb 19	University holiday-- no scheduled class
Wed Feb 21	Simultaneous equations bias (Hayashi, Sections 3.1-3.2; Hamilton, Section 9.1)
Mon Feb 26	Applied econometrics (Mankiw, Romer, and Weil; Wall)
Wed Feb 28	Applied econometrics (Cameron and Heckman; Angrist; Hamilton 1998)
Mon Mar 5	General formulation (Hayashi, Section 3.3; Hamilton, Section 9.2)
Wed Mar 7	Generalized method of moments (Hayashi, Sections 3.4-3.6; Hamilton, Section 14.1)
Mon Mar 12	Uses of GMM (Hayashi, Sections 3.8-3.9; Hamilton, Section 14.2)
Wed Mar 14	Maximum likelihood estimation-- a deeper perspective (Hamilton, Section 14.4)
Wed Mar 21	Final exam (9:00-12:00)